2: Gamble S-5 (1926-1933)1954 AF12 North China AF12

Their wearers did not belong to the very old group, but were men between 46 and 55 years of age.

A surprisingly small number of persons with physical disabilities were reported in the 515 families.[1] The total was 25. Only three of these were females. There were three blind men and three men and one woman were blind in one eye. Two men were dumb and six were deaf. Lameness was serious enough to be reported for four men and two women. Two men had paralyzed arms and two paralyzed fingers.

With less than one per cent of the group reported as having physical disabilities one cannot but wonder whether the report was incomplete or whether the extra difficulties of life had eliminated others who might have been stricken.

Home Ownership

Home ownership was almost universal for these Ting Hsien families. The figures are 98.8 per cent for the 5,255 families and 96.3 per cent for the 515 families. In a group of families living in Peking only 21.2 per cent owned their homes.[14]

About two-thirds of the non-owners were given the use of their homes, so house rent was paid by only 0.4 per cent of the 5,255 families and by 1.4 per cent of the 515 families. The small proportion of home renters makes it evident that a large proportion of those classed as tenant farmers owned their homes, even though they rented all of the land they farmed. In the 1st District 11.4 per cent of the families were tenant farmers, in the hsien only 4.7 per cent.

The high percentage of home ownership indicates very definitely that Ting Hsien had a steady, settled population and that almost all of the families had been in the area long enough to accumulate the funds needed to buy their homes. Quite a number of the families said that their ancestors came to Ting Hsien about 500 years ago.

In the 71 villages in the 1st District the average family residence area was 2.1 mu, about 100 x 150 feet. In that area the family would have its living quarters, housing for any animals, and storage for all farm equipment and for its food, fodder, and fertilizer.

The total residence area in the 71 villages varied from eight to 800 mu. Sixteen villages had less than 50 mu each. Fourteen had 300 or more mu. The average per family varied from 0.4 mu to 8.2 mu, but

14. Gamble, *op. cit.*

1 [In Ting Hsien -- Analyst]

2: Gamble S-5 (1926-1933) 1954 AF12 North China AF12

only five villages had an average of more than 4.0 mu per family. In 57.8 per cent of the villages the average residence area was less than two mu per family.

A study of the residence area of 357 families living in two villages gave detailed figures of relatively crowded conditions that would be typical of the more crowded 25 per cent of the villages in the 1st District. The average residence area was 0.78 mu, about 70 x 80 feet. More than 30 per cent of the families had less than half a mu, 60 x 60 feet. Only four families had as much as 2.5 mu. The largest home place was 10 mu. (See Table 11.)

The estimates of the average value of the land inside the villages, as given by the elders of the 453 villages, ranged from under $100 per mu to $1,000 and over. In 28.8 per cent of the villages the average value was under $200 per mu. In 18 per cent it was given as $400 or more per mu. There were only three villages with an estimated value of $1,000 or more per mu. The median value was between $250 and $299 per mu.

The size of the houses, counting all the rooms used for the family living quarters and for farm purposes, ranged from one to 60 chien for the 5,255 families and from one to 34 chien for the 515 families. A chien, the space between two roof trusses, generally varied from 10 x 10 to 12 x 12 feet. The number of chien usually corresponds closely with the number of rooms, but is not always the same, for it is possible to have a half chien room or a two or three chien room. In our study rooms and chien are assumed to be equal.

The average number of rooms per family was 6.2 for the 5,255 families and 6.8 for the 515 families. For the renting families, the averages were 2.9 and 2.7 rooms, while for those who borrowed or were given the use of their homes, the averages were 1.8 and 2.0. The average number of persons per chien was 1.1 and 1.0. (See Table 13.)

Figure 12 shows that the largest number of families had three rooms, then in order five, six, and four rooms. These four groups included 58.8 per cent of the 5,255 families and 52.5 per cent of the 515 families.

According to one of our investigators a three room house consisted of the family bedroom at one end of the house, a room at the other end which was storeroom, barn, and granary combined, and a middle room with a built-in stove, which served as kitchen and living room. At night chickens, a pig, and even a donkey were kept in the middle room lest they be stolen. The door of the house usually opened into the middle

2: Gamble S-5 (1926-1933)1954 / AF12 North China AF12

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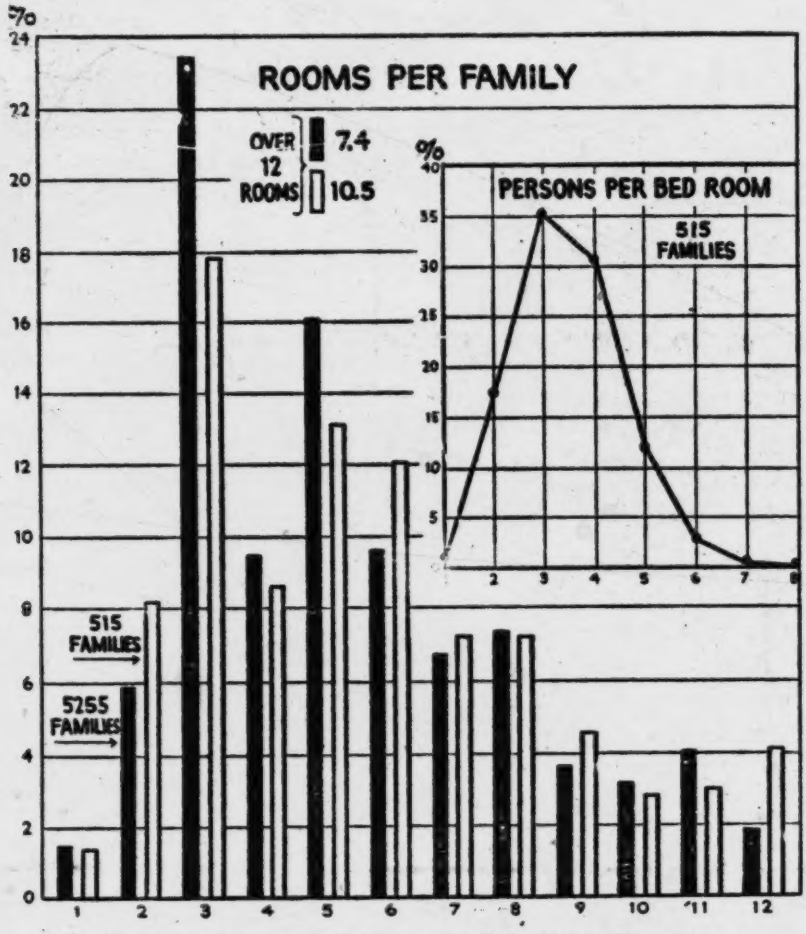

FIGURE 12. ROOMS PER FAMILY AND PERSONS PER BEDROOM

room. In the bedroom there was ordinarily a built-in brick bed or k'ang with a flue under it so it could be heated in winter.

The 515 families reported that they had from one to 12 bedrooms, with the average three per family. Seventy-three per cent of the families had from one to three bedrooms per family.

When the families were asked what was the largest number of per-

2: Gamble S-5 (1926-1933) 1954 AF12 North China AF12

342 sons sleeping in their bedrooms, the answers varied from one to eight. Sixty-six per cent had either three or four persons. Almost half, 46.4 per cent, reported more than three persons. The average was 2.3 persons per bedroom, which would seem to indicate that, on the average, the homes of these rural families were not especially crowded.

Economic Activity

463 A sample of the economic activity and the family occupation life in the villages was secured by asking the 1,282 males and 1,176 females over 12 years of age in the 515 family group what was their primary work and what, if any, was their secondary occupation. Eighty-eight per cent of the males and 80 per cent of the females were doing farm work. Only 18.6 per cent of the men and 18.5 per cent of the women reported a primary occupation that was non-farming.

Besides farming the men reported 55 different primary and 56 secondary occupations. There was, of course, a great deal of duplication in the two lists. For the women the lists were much shorter, nine primary and 12 secondary non-farming occupations. Similar occupations have been combined in the figures in Table 14.

Thirty per cent of the males and 38 per cent of the females reported secondary work. Farming was the primary work for most of these. Secondary work could be done during the winter months or other slack times on the farm. Only 12 of the men with non-farming primary occupations reported any secondary work. For 11 of those the secondary work was farming, evidently helping out during the busy seasons.

Only 3.7 per cent of the males and 1.3 per cent of the females reported that they were idle or had no occupation. The women apparently did not ordinarily think of home making as an occupation, for only 3 per cent gave that as their vocation.

Seventy-nine per cent of the males were working on the farms operated by their families. Nine per cent did some farm work for wages. Five per cent did both types of farm work. No women reported doing farm work for wages. Thirty-eight of the families, 7.4 per cent, owned no land; 22 families, 4.3 per cent, farmed no land. These proportions were practically the same as those for the entire hsien (see Chapter X).

Six and one-half per cent of the males were engaged in selling, either in stores or as itinerant peddlers. One woman was selling cakes. Almost 10 per cent of the males worked as laborers, skilled or unskilled, as

2: Gamble S-5 (1926-1933) 1954 AF12 North China AF12

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TABLE 9. AGE OF FEMALES WITH BOUND AND UNBOUND FEET
(515 families)

Age	Unbound Feet	Bound Feet	Total	Per Cent Bound
Under 5	294	–	294	–
5–9	169	–	169	–
10–14	152	9	161	5.6
15–19	120	29	149	19.5
20–24	52	77	129	59.7
25–29	24	106	130	81.5
30–34	6	97	103	94.1
35–39	6	103	109	94.5
40 and over	4	488	492	99.2
	827	909	1,736	

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TABLE 10. RESIDENCE AREA PER FAMILY
(village averages, 1st District)

Mu	Villages	Per Cent	Mu	Villages	Per Cent
Under 0.5	2	2.8	3.0–3.4	7	9.9
0.5–0.9	16	22.6	3.5–3.9	3	4.2
1.0–1.4	15	21.1	4.0–4.4	2	2.8
1.5–1.9	8	11.3	4.5–4.9	2	2.8
2.0–2.4	10	14.1	5 and over	2	2.8
2.5–2.9	4	5.6	Total	71	100.0

TABLE 11. RESIDENCE AREA, TWO VILLAGES

Mu	Families	Per Cent
Under 0.5	113	31.7
0.5–0.9	138	38.6
1.0–1.4	72	20.2
1.5–1.9	19	5.3
2.0–2.4	11	3.1
2.5 and over	4	1.1
	357	100.0

2: Gamble S-5 (1926-1933)1954 AF12 North China AF12

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TABLE 12. AVERAGE VALUE OF LAND IN VILLAGES

	Villages	*Per Cent*		*Villages*	*Per Cent*
Under $100	16	3.5	350–399	22	4.9
100–149	50	11.0	400–499	42	9.3
150–199	65	14.3	500–599	30	6.6
200–249	85	18.8	600 and over	9	2.0
250–299	54	11.9	Total	453	100.0
300–349	80	17.7			

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TABLE 13. ROOMS PER FAMILY (percentages)

Rooms	*5,255 Families*	*515 Families*
1–3	30.7	27.2
4–6	35.3	33.8
7–9	17.3	18.8
10–12	8.8	9.[illegible]
13–15	3.4	4.8
16–18	2.1	3.1
19–21	1.1	1.6
22–24	0.3	0.6
25 and over	0.8	0.4
	100.0	100.0
Average rooms	6.2	6.8
Persons per room	1.1	1.0

2: Gamble S-5 (1926-1933)1954 AF12 North China AF12

area. Only 11.8 per cent of the total crop area was operated by renters. With 88.2 per cent of owner operation there would be very few of the problems resulting from landlordism and tenancy.

The number of crop mu reported was 15,044. The amount of double cropping therefore was 2,667 mu and the index of double cropping 121. Buck[1] in his land study gave the double cropping index for Hopei province as ranging from 125 to 155. For our three ownership groups there was but little difference in the index. The range was 117 to 124. The lowest was for the tenants, the highest for the part-owners.

We do not have an estimate of the amount of uncultivated and waste land held by the 400 families, nor do we have any figures giving the area of their houses. The latter, of course, were all in the villages and separate from the farm lands. In the 62 villages the cultivated land was 83.3 per cent of the total area; houses 4.7 per cent; roads, graves, and other uncultivated land 12.0 per cent.

A comparison of the averages of the different farm groups shows that many of the differences are directly related to the differences in the size of the farms; the amounts per mu are apt to be quite similar. That being the case, the figures for our 21–30 mu group, with an average farm of 25.6 mu, are probably much more typical for the 62 villages of the Experimental District and for all of Ting Hsien than the averages for the entire 400 families, whose average farm had 30.9 mu. Because of this difference in the averages we have given in the text many more figures for the different sized farm groups than would be the case if we were presenting the 400 farms as a typical and average group.

How the farms were distributed according to size and ownership is shown in Table 16. It will be noted that there were no part-owner or tenant families in the over 100 mu group and no tenant families in the 41–50 mu group. Only three tenant families had more than 20 mu. They operated different sized farms, so the three upper tenant groups had only one family each. Their figures, of course, cannot be taken as typical for those groups. For both the owners and part-owners, the largest group was the 11–20 mu group, 25 and 41.1 per cent respectively. Fifty-two per cent of the tenants were in the 1–10 mu group. Forty-five per cent of all the farms had from one to 20 mu. Their total area was only 18 per cent of the land. The 25 per cent of the families who had over 40 mu had 55 per cent of the land.

1. J. Lossing Buck, *Land Utilization in China* (University of Chicago Press, 1937).

2 Gamble S-3 (1926-1933)1954 AF12 North China AF12

would make the difference between the two sweet potato figures less than 8 per cent. 511

The average family expenditure for each of the different kinds of food, the number of families reporting its use, and the average amount used are shown in Table 41. The average price per catty is also given. It will be noted that some 40 per cent of the expenditure for sweet potatoes was for those that had been dried. In the dried form they are often ground and cooked as noodles in very much the same way as some of the grains. Only seven families reported using any rice during the year. 511 262

The average daily consumption of cabbage was 2.3 catties per family, of squash 1.6 catties. The leaves of the white beets were used as a green vegetable; the roots were pickled and eaten for flavoring with other food. The turnips were generally cut in strips, pickled, and used as a salt vegetable. The reported 30 catties of fennel, or anise, included the leaves and stems used as a vegetable as well as the seed used for flavoring.

The average amount of salt used was 6.0 catties (8.0 pounds) per person per year. This agrees very closely with the 6.5 catties per person reported by the salt wholesaler. (See Chapter VIII.)

Meat was used almost exclusively at festival time. About three quarters of the expenditure was for pork, the only meat item reported by all the families. Beef was used by four-fifths of the families. Dates were the only fruit used by all the families.

The clothing expenditure averaged $14.85 per family, or $2.48 per person per year. For the different income groups, the amounts per person varied from $2.10 for the $400–$500 group to $2.73 for the $300–$400 group. 511 291

The details of the average family expenditure for clothes are given in Table 42. Cloth, cotton, shoes, and stockings were the items reported by all the families. Native cloth was woven in Ting Hsien. Foreign cloth was not necessarily made abroad. The name was used to indicate both the kind of cloth and the fact that it was made outside of Ting Hsien. It was woven on machine looms. The native cloth was woven on hand looms. The cotton was the cotton batting used to line winter clothes. Eighty-six feet of native cloth, 10 feet of foreign cloth, and 4.6 catties of cotton were the average purchases. The prices were 7.0 cents a foot for native cloth, 10 cents a foot for foreign cloth, and 40 cents a catty for cotton.

Housing seemed to be relatively adequate for there were more rooms 342 511

2: Gamble S-5 (1926-1933) 1954 AF12 North China AF12

342 511

than persons in the average house. The average was 0.9 persons per room. It must be remembered, however, that the number of rooms reported included not only the living rooms of the family but storerooms for farm equipment and supplies and rooms used to house animals. How the number of rooms per family and per person varied in the different income groups is shown in Figure 15 and Table 36. The high average of 1.5 persons per room in the $400–$500 group would lead one to feel that these larger families might recently have been augmented by the addition of extra relatives and had not had time to adjust themselves to the new situation, or possibly there was not room for additional building on the home site inside the village. Certainly there was sufficient surplus in the family budget to finance additional building.

The size of the individual houses varied from three to 15 chien. The 229 chien were divided into 102 with earthen walls and 127 with brick walls. Three of the earthen walled and 23 of the brick walled rooms had porches. The rent value of the different types of houses was estimated to range from $1.80 to $4.20 per chien per year. The average rent per family was $1.55 per month, 6.4 per cent of the family expenditure. For the different income groups the average amount varied from 79 cents to $2.07 per month. (See Table 38.) All of the families owned their homes, so the rent item represents rent value rather than actual expenditure.

The type of house was not closely related to the size of the family income. Twenty-four of the families had some brick walled rooms. Thirteen of these also had earthen walled rooms. Four of the 14 families in the $300–$400 income group had only earthen walled rooms. One family in the $100–200 group had only brick walled rooms.

511

No rent for farm land was included in the family expenditure as that was a farm expense and was paid from the gross farm income.

511 372

Most of the $19.55 used for fuel was the value of the dried grass and stubble and wood grown on the farm or secured from neighbors. Coal, kerosene, and matches, of course, had to be imported. The distribution of the fuel costs was:

Hay and wood	$15.15
Coal	2.25
Kerosene	1.90
Matches	.25
	$19.55

5: Tao E-5 (1926-1927) 1928 AF12 North China AF12

361 In the light of history, therefore, Peking is without doubt the
362 first city in China. Of all cities, it may easily claim to possess the greatest number of solid and well-built residences, not to mention its magnificent palaces and temples. It is evident that time must have worn out many a building that was once intact and erect and doubtless that in many quarters, where communication with the outside world is difficult, there usually stand houses that have already been on their way to ruin and decrepitude. Yet, on the whole, it must be admitted that Peking houses have a dignity of their own, which can hardly be found in any other city in this land. In comparison with the dwarf huts, low and ugly and made of mud, which one finds in the country sides, they are generally built of bricks with tiled roofs and spacious courtyards. In recent years, through the influx of people into Peking due to its various attractions, there has appeared indeed a shortage of housing, for the rent has gone up and poorer families have been compelled to move either to more distant quarters or to more shabby houses. Consequently, enterprising people rose to the occasion and began to build in outlying or dingy districts long rows of tenements for the occupation of the working class families. These houses are of course small and of very frail construction, but if they are all let, they would yield a rack-rent that goes to swell the pockets of the landlords. This, however, is a new development in Peking—an inevitable one in any city in view of its growth and expansion, unless there exists an enlightened municipal authority to take the matter in hand which we shall not go into now.

● 342 The Peking house of the regular type is built in four rows
362 encircling a courtyard. As a rule, each row is a separate build-
598 ing consisting of three rooms or *chien*,[1] the centre room or *chien* being used as a hall with a door, while the main entrance of the house is opened in the row that borders on the street. In the courtyard is usually planted a tree, a date-palm or a willow, its green foliage in the summer furnishing a haven to those who want to seek some shade under the blazing sun. A middle-class

[1] A *chien* is usually an enclosure of 2.5 x 3.0 metres.

5 Tao E-5 (1926-1927) 1928 AF12 North China AF12

342 362 592 family usually occupies an entire house of this kind. It is, however, often found that one house may be shared by two or three families, if they happen to have fewer members and do not care to maintain an establishment that is more than they can use. If the middle-class family sometimes finds it difficult to maintain a house of the above description, as it would require heavy expenses for its rent and upkeep, surely families with smaller incomes must be satisfied with as few rooms as they are able to pay for. With our working families, however, the condition becomes even worse, for it was found that with only two exceptions, every family which we investigated occupied only one room. As one building usually comprises three rooms in a row, they may, by means of partitions or walls, be turned into three separate rooms to accommodate three families, of course with a door to each. So far, only the house of the regular type has been described and obviously there must be houses that do not entirely conform to this type. But in a treatise like this it would be hardly necessary to discuss in detail types of Peking houses, for, general speaking, all residential houses are built around a courtyard and the variations are limited to only the size and height of the building, the number of rooms in each row, the location of the main entrance, etc. And it is to the conditions of the room that we must now turn our attention.

342 362 Both the roof and the ceiling are important elements of the room. In particular, it is usually by the roof that we judge whether a room is fit for human habitation or not. Roofs of Peking houses are of three kinds: those built of tiles are considered the best, being more lasting and expensive, while those of lime or mud are considered of an inferior type. Of the rooms inhabited by our forty-eight families, the roofs were distributed as: tiled, 26, lime, 17, and mud, 5. The make of the roof alone, however, does not indicate the habitability of the room, for it must be so built that no water should drip in while it rains or the snow upon it thaws. On this point, it was found that thirty-seven families lived in rooms imperfectly roofed, while the remaining eleven families had their roofs in good condition.

5: Tao E-5 (1926-1927) 1928 AF12 North China AF12

Obviously, to live under roofs in a dilapidated state means discomfort, especially if rain water leaks through the roof and makes the room including its furnishings entirely wet or soaked with water. It seems that the roofs of the rooms occupied by poorer families are generally in bad shape, since the rental paid by them is low and the landlord is disinclined to lay out money for repair.

The ceiling of the Peking houses is usually made of a framework of reed pasted with wall-paper. In the summer, it shuts out the heat which is absorbed by the roof, while in the winter it keeps the room warm and cosy. But as the paper on the framework usually wears out after a few months, particularly if it has been moistened with water coming through a leaky roof, it requires expense from the occupant every year to keep it in good condition. Therefore, it would not be a surprise to find that forty-one of our families had no ceilings in their rooms.

So much for the roof and the ceiling. Let us now study the space inside the room. The room is usually square in shape. Its size varies, though there are standard measures well-known to the building trade. For the families under investigation, measurements were taken for all the rooms in which they inhabited and it was discovered that their range is as follows:

Length: 2.6-3.7 metres (8-12 Chinese mason's foot-rule).
Width: 2.2-2.9 metres (7-9 Chinese mason's foot-rule).
Height: 2.2-2.9 metres (7-9 Chinese mason's foot-rule).

Of these families, one-fourth lived in rooms of $3.2 \times 2.6 \times 2.2$ metres, which is equivalent to 18 cubic metres. For the average of all rooms, the capacity per room amounts to 20 cubic metres.

In this connection, it is interesting to note that the rooms in which the Peking working families live are of much smaller size that those in Japan. According to Morimoto,[1] the size of the rooms occupied by families of smaller incomes in small and large cities in Japan ranges from 76 to 110 sq. ft. and from 68 to 108 sq. ft. respectively. With our Peking families, however, the

[1] Morimoto, Op. cit., pp. 117, 119.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

VII

HOUSING AND RENT

THE typical Chinese-style house in Peiping is a series of one-story rooms built around the four sides of a courtyard. A family of moderate means usually occupies an entire courtyard. Well-to-do families use several courtyards, ordinarily located one behind the other. In such a house, the servants' quarters are usually in the front courtyard and the family's living rooms in the one farthest from the gateway opening on the street. Poorer families can afford only one or two rooms, so several families live in the same courtyard. One court in the South City is known in the district as the Eight Poor Family Courtyard.

The better-class houses are usually built of grey brick and are roofed with tile. A cheaper type of wall is made of adobe brick faced with a mixture of earth and lime. The roofs of the cheaper houses are made of an earth and lime mixture, or sometimes simply of packed mud. When these become old, they are apt to leak during the summer rainy season.

Light and air for the rooms ordinarily come only from the courtyard, few houses having any windows in the back walls. The upper two-thirds of the front wall is usually wooden latticework, covered with white paper, or white paper with a pane of glass set into the lower part

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

342 of the lattice. In some of the houses, the upper part of the wooden lattice can be opened during the summer, but in winter the cracks are all pasted over to keep out the cold. Ventilation is then provided by an opening in the paper about 12 x 18 inches in size. It is opened and closed by rolling up or down a piece of paper that hangs over the opening. A good deal of air also filters in around the door, since most of the rooms, especially those in the poorer houses, open directly on the courtyard, and ordinarily the doors are not closely fitted. In some three-room houses there is only one outside door. It opens into the middle room.

The floors of most Peiping houses are only a few inches above the ground. In the better houses, they may be raised some two or three feet. Most of the floors are of dirt or tile. Wooden floors are found only in the more expensive houses, and then usually in only a few of the rooms.

In many of the rooms, a large part of the floor space is occupied by a *k'ang,* or raised platform some fifteen inches high and six feet wide, which serves as a bed for all the members of the family. Its length depends on the size of the room. In many cases, it extends across the entire room. Of necessity, much of the daytime life and work is carried on upon the *k'ang,* as it occupies so large a part of the floor space. The top of the *k'ang* usually is covered with a reed mat. A flue ordinarily runs underneath it, so that it can be warmed in winter—a tremendous help and comfort for people who must live through cold winters with little fuel, at best.

X511 Because of the difficulty of handling the additional detail, working out standards, et cetera, we did not attempt

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

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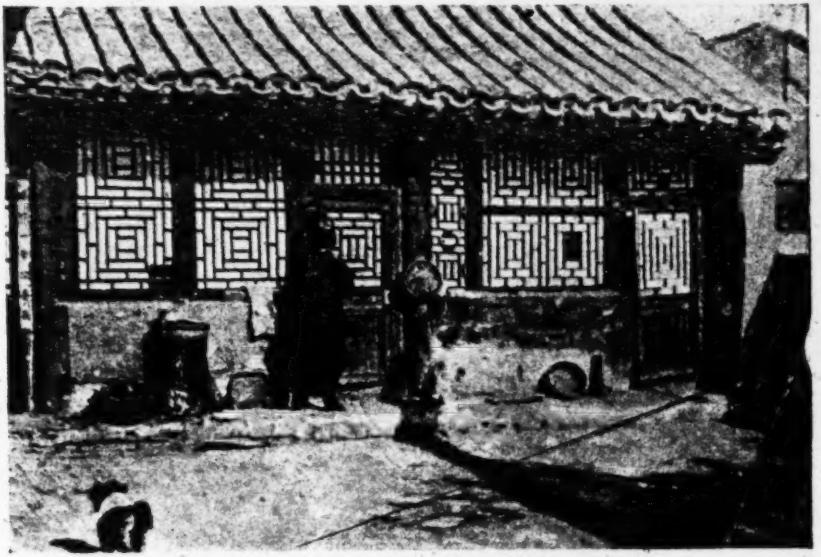
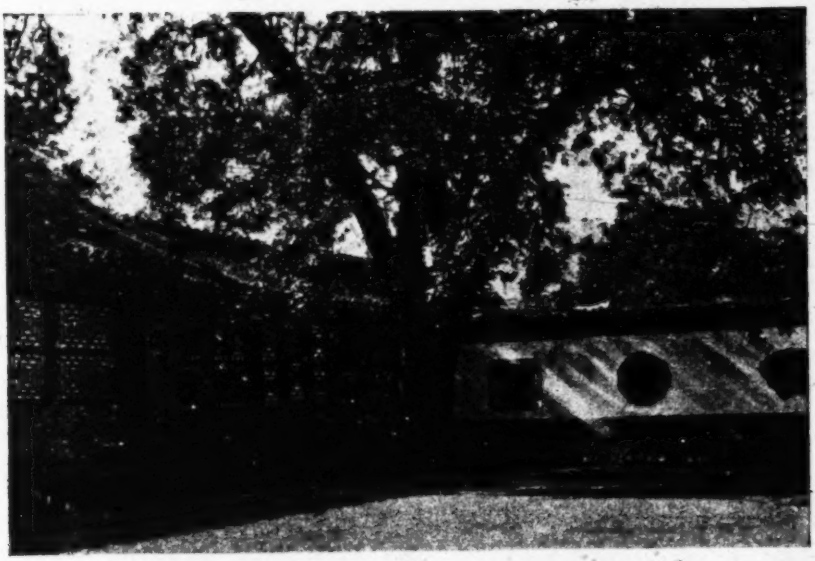


WORKING-CLASS FAMILY HOMES

Two of several opening onto a common courtyard. The windows are paper-covered, except for one small pane of glass. The chimney standing near the door is used for starting the coalball stove.



COURTYARD OF A WELL-TO-DO HOME

[FACING P. 124]

8: Lin E-5 (1927)1928 AF12 North China AF12

511 262 Food expenses include cereals, vegetables, condiments, meats and refreshments. These expenses were obtained first by ascertaining the quantity of each kind of food consumed every month and then multiplying it by its average monthly price. There are six kinds of cereals in common use: white wheat flour, black wheat flour, corn flour, rice, millet, and green beans. For the poor families, black wheat flour and corn flour are the principal cereals, while only workers earning more than $20 a month can afford to eat rice. Appetizers of the poor families consist simply of salted vegetables and shrimp sauce. Meat is seldom taken by the worker's families, except during festivals and new year holidays.

511 427 Rent is the amount paid for occupying the house. Where an occupant is the owner of the house, rent is estimated by valuation. Rent is very low in comparison with all other expenses. Three explanations may be offered for this phenomenon. First, some of these houses were bought by the factory and rented to the workers at an especially low rental. Secondly, in spite of the steady rise of prices in recent years, an old occupant of a house usually enjoyed the privilege of paying rent at the original rate and was not effected by its rise. Besides, some workers lived in the west of Tangku, where rent was usually half of what one should pay for a room in the sections near to the town. Thirdly, the size of these families is small, the average size being only 3.72 persons per family. Thus, a one-room-house would be sufficient to accommodate them all. Even those who had bigger families would prefer to stay in a small house and enjoy less comfort in order to reduce their expenses.

[342] 362 511 427 The worker's houses are generally built of mud with frail framework. Sometimes rooms are built around a courtyard accommodating from five to twenty families. Glass windows and brick floor are but rarely found in such rooms. Except those who lived in their own houses, each of these working familes only occupied one or two rooms. It is shown in Table 36 that the average number of rooms of the 61 families was 1.72 per family, the average number of persons per room was 2.67 persons or 2.05